

## **REMARKS**

In view of the foregoing amendments and these remarks, it is submitted that the objections raised in the office action have been overcome.

### **Claim Amendments**

Claim 1 has been amended to "An intact cell wall structure having a honeycomb structure derived from a starting flour comprised primarily of beta-glucan wherein a honeycomb structure is defined as a concentrate of beta-glucan of essentially intact cell wall structures of the starting flour having significant void spaces within the cell wall structure." Claims 2 and 14 have been amended to maintain consistency of language in view of the amendment to claim 1. Claim 15 has been amended to include the definition of "dispersability" within the claim.

### **Drawings**

In the office action, the Examiner objected to the drawings as not showing the honeycomb structure of the beta-glucan as specified in the claims. Applicant respectfully disagrees and submits that the term "honeycomb structure" is clearly defined in the specification such that the honeycomb structure of the beta-glucans as defined is clearly shown in the drawings.

Specifically, paragraph [0039] defines a honeycomb structure as "a concentrate of beta-glucan which comprises an essentially intact cell wall structure or matrix of the starting flour and that has significant void spaces within the cell wall structure or matrix".

As a result and on the basis that the specification provides a clear definition of "honeycomb", the worker of ordinary skill would clearly understand that the Figures show this feature. Withdrawal of the objection to the drawings is therefore requested.

### **Claim Rejections**

#### **Subject Technology**

The subject technology describes unique beta-glucan structures that heretofore have not been disclosed. Grain flours are subjected to a gentle concentrating process that strips away native protein and starch leaving behind an intact cell wall structure defined as having a "honeycomb structure".

### **Claim Rejections 35 USC §102**

The Examiner rejected claims 1 and 14-17 under 35 USC §102(b) as anticipated by Takeuchi (US Patent 5,387,564).

US patent '564 describes a process for the molding and calcining of zeolite powder which is entirely unrelated to the intact cell wall structures of beta-glucans as described and claimed in the subject application.

While the '564 patent indicates that the zeolite may be blended with a  $\beta$ -1,3-glucan and extruded to a honeycomb structure, such a honeycomb structure is entirely unrelated to the form of native cell  $\beta$ -glucan within the subject invention.

As amended, Claim 1 reads:

"An intact cell wall structure having a honeycomb structure derived from a starting flour comprised primarily of beta-glucan wherein a honeycomb structure is defined as a concentrate of beta-glucan of essentially intact cell wall structures of the starting flour having significant void spaces within the cell wall structure."

US '564 fails to disclose "an intact cell wall structure having a honeycomb structure". Accordingly, claim 1 and its dependent claims are patentably distinguished over the subject matter described within US '564. Reconsideration of the objections in view of this reference is respectfully requested.

Furthermore, US '564 fails to disclose a beta-glucan concentrate having a high dispersability as defined within the specification and as would be understood by one of ordinary skill in the art. Specifically, at paragraph [0056], dispersability is defined as  $\text{Dispersability \%} = [\text{Wt}_{\text{sample}} - \text{Wt}_{\text{lumps}}] \cdot 100 / \text{Wt}_{\text{sample}}$  where  $\text{Wt}_{\text{sample}}$  is the weight of sample and  $\text{Wt}_{\text{lumps}}$  is the weight of dried and stabilized lumps. As such, the use of the term "dispersability" is neither subjective or relative.

### **Claim Rejections 35 USC §103**

The Examiner has objected to claims 1, 2 and 14-17 under 35 USC §103 as obvious in view of US '564 patent and US patent 6,242,033 (Sander) (US '033). In view of the

foregoing amendments and remarks with respect to US '564, it is believed that the claims as amended are patentably distinguished over US '564.

For completeness, Applicant offers the following comments with respect to US '033. The Examiner appears to be citing US '033 as an example of a reference teaching that oats or barley contain beta-glucans. Given that US '033 fails to teach "An intact cell wall structure having a honeycomb structure comprised primarily of beta-glucan" as required by instant claim 1, it is submitted that the objections raised in view of this reference are overcome.

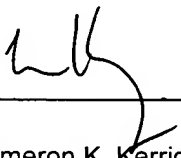
In view of the foregoing, favorable reconsideration of the application is requested.

Applicant requests a three month extension of time within which to file this response. The Commissioner is authorized to charge the fee for such extension to Squire, Sanders & Dempsey Deposit Account No. 07-1850.

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Respectfully submitted,

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